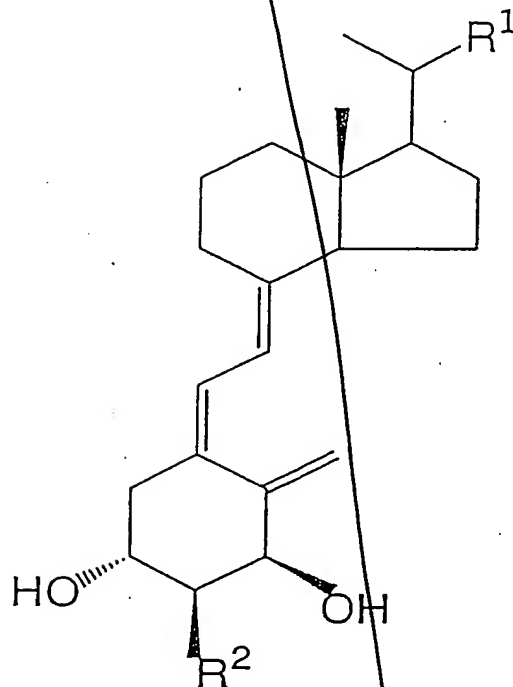


CLAIMS

1. A vitamin D derivative represented by Formula (I):



(I)

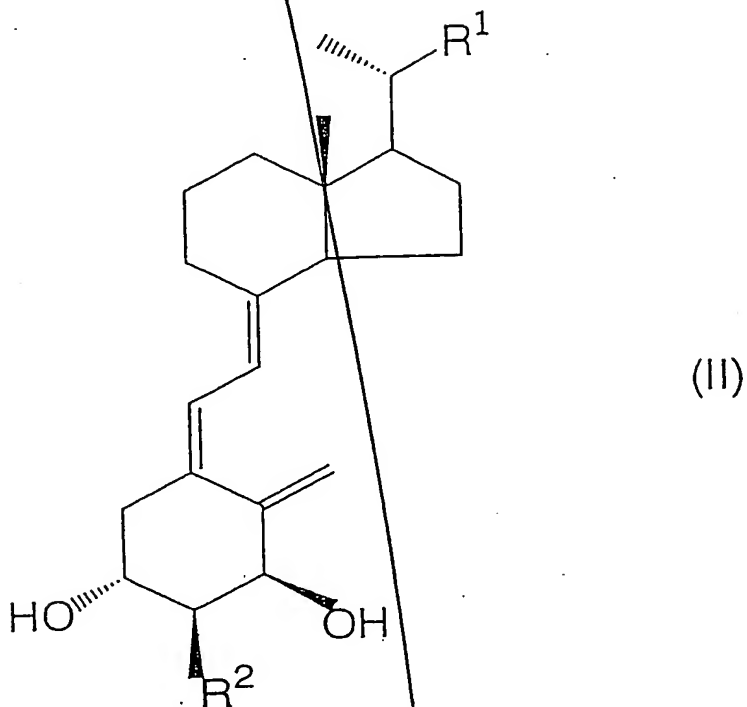
wherein

R^1 represents a saturated aliphatic C_{1-15} hydrocarbon group optionally substituted with 1 to 3 hydroxy or protected hydroxy groups; and

R^2 represents a saturated aliphatic C_{1-10} hydrocarbon group optionally substituted with one or more substituents, which may be the same or different and which are selected from the group consisting of a hydroxy group, a halogen atom, a cyano group, a lower alkoxy group, an amino group and an acylamino group, provided that when R^2 represents a saturated aliphatic C_1 hydrocarbon group, R^2 is substituted with at least one substituent.

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2. The vitamin D derivative of claim 1 which is represented by Formula (II):

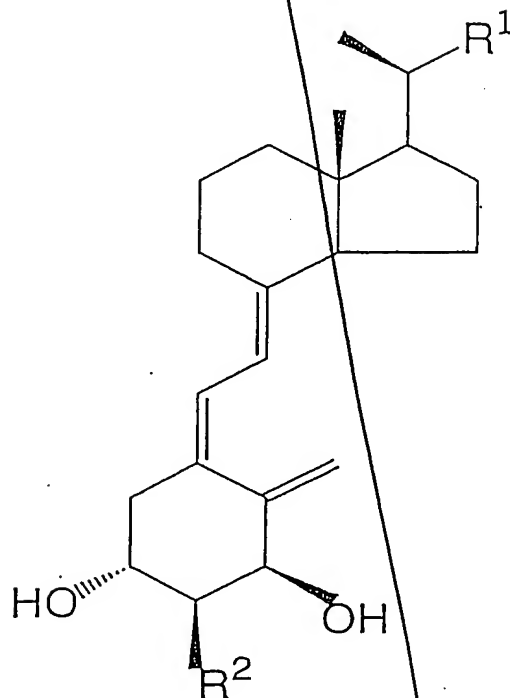


wherein

R¹ represents a saturated aliphatic C₁₋₁₅hydrocarbon group optionally substituted with 1 to 3 hydroxy or protected hydroxy groups; and

R² represents a saturated aliphatic C₁₋₁₀hydrocarbon group optionally substituted with one or more substituents, which may be the same or different and which are selected from the group consisting of a hydroxy group, a halogen atom, a cyano group, a lower alkoxy group, an amino group and an acylamino group, provided that when R² represents a saturated aliphatic C₁hydrocarbon group, R² is substituted with at least one substituent.

3. The vitamin D derivative of claim 1 which is represented by Formula (III):



(III)

wherein

R^1 represents a saturated aliphatic C_{1-15} hydrocarbon group optionally substituted with 1 to 3 hydroxy or protected hydroxy groups; and

R^2 represents a saturated aliphatic C_{1-10} hydrocarbon group optionally substituted with one or more substituents, which may be the same or different and which are selected from the group consisting of a hydroxy group, a halogen atom, a cyano group, a lower alkoxy group, an amino group and an acylamino group, provided that when R^2 represents a saturated aliphatic C_1 hydrocarbon group, R^2 is substituted with at least one substituent.

4. The vitamin D derivative according to one of claims 1

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to 3, wherein R² is a hydroxymethyl group, a hydroxyethyl group, a hydroxypropyl group, a hydroxybutyl group, a hydroxypentyl group, a hydroxyhexyl group, an ethyl group, a propyl group, a butyl group, a pentyl group or a hexyl group.

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5. The vitamin D derivative according to one of claims 1 to 4, wherein R¹ is a 4-hydroxy-4-methylpentyl group.

6. The vitamin D derivative according to claim 1 selected from the group consisting of

(5Z,7E)-(1S,2S,3R,20R)-9,10-seco-5,7,10(19)-cholestatriene-2-hydroxymethyl-1,3,25-triol,

(5Z,7E)-(1S,2S,3R,20R)-9,10-seco-5,7,10(19)-cholestatriene-2-(2'-hydroxyethyl)-1,3,25-triol,

(5Z,7E)-(1S,2S,3R,20R)-9,10-seco-5,7,10(19)-cholestatriene-2-(3'-hydroxypropyl)-1,3,25-triol,

(5Z,7E)-(1S,2S,3R,20R)-9,10-seco-5,7,10(19)-cholestatriene-2-(4'-hydroxybutyl)-1,3,25-triol,

(5Z,7E)-(1S,2S,3R,20R)-9,10-seco-5,7,10(19)-cholestatriene-2-(5'-hydroxypentyl)-1,3,25-triol,

(5Z,7E)-(1S,2S,3R,20R)-9,10-seco-5,7,10(19)-cholestatriene-2-(6'-hydroxyhexyl)-1,3,25-triol,

(5Z,7E)-(1S,2S,3R,20R)-9,10-seco-5,7,10(19)-cholestatriene-2-ethyl-1,3,25-triol,

(5Z,7E)-(1S,2S,3R,20R)-9,10-seco-5,7,10(19)-cholestatriene-2-propyl-1,3,25-triol,

(5Z,7E)-(1S,2S,3R,20R)-9,10-seco-5,7,10(19)-cholestatriene-2-butyl-1,3,25-triol,

(5Z,7E)-(1S,2S,3R,20R)-9,10-seco-5,7,10(19)-cholestatriene-

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2-pentyl-1,3,25-triol and

(5Z,7E)-(1S,2S,3R,20R)-9,10-seco-5,7,10(19)-cholestatriene-
2-hexyl-1,3,25-triol.

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7. A pharmaceutical composition comprising a vitamin D
derivative according to any one of claims 1 to 6 as an
active ingredient.

8. The pharmaceutical composition according to claim 7,
wherein the composition is a therapeutic agent for a
disease associated with abnormal calcium metabolism, an
antitumor agent or an immunomodulator.